

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

IN THE MATTER OF:

NOJIMA ET AL

DOCKET NO.:

REISSUE OF U.S. PATENT NO. 5,679,313

SERIAL NO. 08/472,057

ISSUED: OCT. 21, 1997

FOR: AMMONIA DECOMPOSITION CATALYSTS

MAR 01 2004

**SECOND SUPPLEMENTAL REISSUE DECLARATION**  
**OF ASSIGNEE OF ENTIRE INTEREST**

Hon. Commissioner of Patents  
And Trademarks  
Washington, D.C. 20231

Sir:

As the representative of the assignee of the entire interest, I further declare:

- (1) That the inventors NOJIMA, Shigeru; TOKUYAMA, Rie; and IIDA, Kouzo are joint inventors of the invention claimed;
- (2) That the named inventors are the original and first inventors of the subject matter which is claimed and for which a patent is sought;
- (3) Applicants acknowledge the Duty to Disclose all information known to be material to patentability as defined in 37 CFR 1.56 and further acknowledge that they are unaware of any prior art other than the prior art identified in the Information Disclosure Statement attached to the subject reissue application that has not already been made of record to date;

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(4) That it is applicants' belief that the original patent is partly inoperative or invalid based upon the inclusion of claim 5 which applicants consider unpatentable in view of a reference DE 40 20 914 cited in the European Search Report, identified in the Information Disclosure Statement requested to be made of record in paragraph eleven (11) of the Reissue Declaration of Assignee, for the reasons as explained hereinafter;

(5) That the catalyst recited in claim 5 of the subject patent, comprises as a carrier "at least one porous material selected from the group consisting of  $\gamma$  aluminum oxide..." and "iridium as an active metal"; both of which represent noble metals. However, claim 5 does not exclude the presence of a transition metal. The reference DE 40 20 914 discloses the use of a catalyst comprising a carrier ( $\gamma$  aluminum oxide), a catalytic active mixture of a noble metal and a transition element (vanadium and/or molybdenum). Thus, Applicant believes claim 5 reads on the teaching of reference DE 40 20 914 and, if not cancelled, renders the original patent partly inoperative or invalid.

(6) However, Applicant believes that the reference DE 40 20 914 is not applicable to the other claims 1, 2-4, 6 and 7 of the subject patent in that the catalyst of claim 1 comprises silicon as a carrier and iridium as an active metal whereas reference DE 40 20 914 does not disclose a catalyst comprising silicon as a carrier. The other claims 2-4, 6 and 7 of the subject patent comprise the use of both a first and a second catalyst which are clearly not disclosed in the reference DE 40 20 914;

(7) It is applicants' belief that based upon the foregoing claim 5 is clearly inoperative or invalid and, in turn, the original patent containing claim 5 is thereby rendered partly inoperative or invalid;

(8) That the references cited in the European Search Report, identified in the Information Disclosure Statement which Assignee requested be made of record in paragraph eleven (11) of the Reissue Declaration of Assignee, were not made of record during the prosecution of the patent despite the attempt by Applicant to do so as explained in detail in paragraphs (5) through (9) of the Reissue Declaration of Assignee; and


(9) That through error and without deceptive intent as set forth in paragraphs (5) through (14) of the Reissue Declaration of Assignee the amendment canceling claim 5, filed with the Supplemental Declaration, should be entered and the patent reissued.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

February 23, 2004  
Date

Yoshinori NISHIMURA  
Name

General Manager of Intellectual Property Department  
Title

  
Signature